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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,334	01/03/2000	MAKOTO SAITO	990696A	7676

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ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
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SUITE 1000  
WASHINGTON, DC 20006

EXAMINER
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HAYES, JOHN W

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/476,334

Applicant(s)

SAITO, MAKOTO

Examiner

John W Hayes

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 88-121 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 108,109,114 and 115 is/are allowed.  
6) ☒ Claim(s) 88-98,101-107,110 and 116-121 is/are rejected.  
7) ☒ Claim(s) 99,100 and 111-113 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 31 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 27 September 2004 have been fully considered but they are either not persuasive or moot based on the new grounds of rejection.

With respect to claims 110 and 116, applicant argues that Choudhury does not teach or suggest transferring a second secret-key for re-encrypting both the decrypted data and a copyright management program to the primary user terminal via the communication network. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., transferring a second secret-key for re-encrypting both the decrypted data and a copyright management program to the primary user terminal via the communication network) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Considering the claims in the broadest reasonable interpretation, claims 110 and 116 merely recite a means for transferring the first secret-key for encrypting the requested data by the first secret-key and decrypting the encrypted data, the second secret-key for re-encrypting the decrypted data and a copyright management program, to the primary user terminal via the communication network. Examiner interprets this language to indicate that two secret-keys are transferred as well as a copyright management program. This language does not specifically specify that the copyright management program is being encrypted or re-encrypted.

With respect to claims 90 and 107, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., decrypting encrypted data for display and then re-encrypting the displayed data using a second key) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). These claims only specify that the data is processed rather than displayed.

Art Unit: 3621

With respect to the double patenting rejection, applicant contends that the additional functions recited in claims 1 of U.S. Patent 5,646,999 and 6,097,818 were required for the patentability of the respective claims. Examiner first notes that the elements removed from claim 1 of '999 and '818 related to steps of a method. The claims of the instant application are directed to an apparatus and, therefore, do not require the recitation of method steps. Thus, it would have been obvious that the recitation of method steps in an apparatus claim would not be necessary. Examiner does not dispute that the method steps were necessary for patentability in the '999 and '818 patent, however, method steps are not necessary for the patentability of the claims in the instant application since the claims in the instant application are directed to an apparatus. Thus, examiner is maintaining the rejection of the claims under obviousness type double patenting.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 88-89, 97-98, 101-106 and 117-119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al, U.S. Patent No. 5,504,816 in view of Choudhury et al, U.S. Patent No. 5,509,074 and Butter et al, U.S. Patent No. 5,381,480.

As per **Claims 88, 106 and 117-118**, Hamilton et al disclose a terminal device for communicating with a copyright management system which manages a copyright of data which is supplied as encrypted data from a database to a user, said terminal device comprising:

- means for receiving a first secret-key and a second secret-key (Col. 2, lines 49-55; Col. 5, lines 45-50; Col. 6, lines 20-25 and 41-50; Col. 7, lines 56-65);
- means for receiving encrypted data via a network, a satellite or a storage medium (Figures 1 and 2);

Art Unit: 3621

- means for decrypting said encrypted data to decrypted data by using said first secret-key (Col. 4, lines 60-65); and

- re-encrypting means for encrypting said displayed data to re-encrypted data by using said second secret-key (Col. 5, lines 25-48).

Hamilton et al, however, fails to explicitly disclose that the encrypted data is being decrypted using the first secret key when the encrypted data is displayed. Choudhury et al discloses a copyright protection method using cryptographic protocols and teaches a method of encrypting unencrypted data using a first secret key (Col. 2, lines 59-61; Col. 4, lines 1-26), supplying the encrypted data to a primary user and decrypting the encrypted data using the first secret key (Col. 2, lines 60-64; Col. 4, lines 1-26), when the encrypted data is being displaying or otherwise processed (Col. 2, lines 60-64; Col. 4, lines 1-26). Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Hamilton et al and include the ability to display the decrypted data when it is desired to be displayed as taught by Choudhury et al. One would have been motivated to incorporate this step since it would allow the decrypted data to be displayed when it is desired during the time between the steps of decrypting and re-encrypting.

Hamilton et al further fails to explicitly disclose that the first and second keys are received from the copyright management center. Hamilton et al does disclose, however, that the decrypting and re-encrypting device is given appropriate re-encryption parameters by a cable access control computer which may be located in various locations (Col. 7, lines 57-65). Examiner submits that this cable access control computer may be considered to be the copyright management center since the cable access control computer is providing the decrypting and encrypting keys that prevent copyright misuse or general pirating of the content. Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the first and second keys by a copyright management system as suggested by Hamilton et al in order to prevent copyright misuse or general pirating of the content.

Hamilton further fails to explicitly disclose decrypting encrypted data for display, prior to re-encryption. Butter et al disclose a system for translating encrypted data and further disclose encrypting unencrypted data using a first secret key (Col. 1, lines 10-13 and 47-53; Col. 2, lines 27-31; Col. 3, lines 1-8; Col. 4, lines 10-15), decrypting the data using the first secret key (Col. 1, lines 15-20 and 59-64; Col.

Art Unit: 3621

2, lines 7-10 and 30-37; Col. 4, lines 19-23) and re-encrypting the decrypted data using a second secret key and transferring the re-encrypted data and not the decrypted data (Col. 1, lines 19-27; Col. 2, lines 37-53; Col. 3, lines 4-8; Col. 4, lines 27-34). Butter et al does not explicitly disclose displaying the decrypted data by the authorized party at the second site, however, examiner submits that this would have been obvious to one having ordinary skill in the art at the time of applicant's invention. Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Hamilton et al et al and include the capability to display the decrypted data prior to re-encrypting the decrypted data with a second secret-key as suggested by Butter et al and Choudhury. Butter et al provides motivation by indicating that in some cases, data must be transmitted from a second site to a third site which does not have the same secret key, but a different secret key and that it is sometimes necessary to translate the data using a second secret key that the third site has access to. Thus, information could be encrypted by a first site using a first secret key, decrypted and accessed or displayed by a second site using the first secret key and further re-encrypted by the second site using the a second secret-key used by the third site.

As per **Claims 89 and 119**, Hamilton et al further disclose wherein the re-encrypting means encrypts the data to re-encrypted data when the data is transferred (Col. 5, lines 25-48).

As per **Claim 97**, Hamilton et al further disclose adding copyright information to the encrypted data as a copyright information label (Col. 5, lines 5-8 and 54-65).

As per **Claim 98**, Hamilton et al fail to specifically disclose adding a digital<sup>2</sup> signature to the encrypted data. Examiner takes Official Notice that the use of digital signatures is well known in the art and it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to include a digital signature when encrypting the data to authenticate the source of the encrypted data.

As per **Claims 101-104**, Hamilton et al fail to specifically disclose wherein the copyright management program is stored in a ROM of the terminal device which the user uses or a ROM of an IC

Art Unit: 3621

card which the terminal access. Choudhury et al disclose a copyright control program that is available to the user to control access to the data (Figures 1-3; Col. 3, lines 40-49; Col. 4, lines 19-27). Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Hamilton and utilize a copyright control program as taught by Choudhury et al and store this program anywhere that is accessible by the user in order to control access to the copyright data.

As per Claim 105, Hamilton et al further disclose wherein the first secret key and the second secret key are different from each other (Col. 2, lines 49-55; Col. 5, lines 45-50; Col. 6, lines 20-25 and 41-50; Col. 7, lines 56-65).

4. Claims 90-91, 107 and 120-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton et al, U.S. Patent No. 5,504,816.

As per Claims 90-91, 107 and 120-121, Hamilton et al disclose a terminal device for communicating with a copyright management system which manages a copyright of data which is supplied as encrypted data from a database to a user, said terminal device comprising:

- means for receiving a first secret-key and a second secret-key (Col. 2, lines 49-55; Col. 5, lines 45-50; Col. 6, lines 20-25 and 41-50; Col. 7, lines 56-65);
- means for receiving encrypted data via a network, a satellite or a storage medium (Figures 1 and 2);
- means for decrypting said encrypted data to decrypted data by using said first secret-key when said encrypted data is processed (Col. 4, lines 60-65); and
- re-encrypting means for encrypting said displayed data to re-encrypted data by using said second secret-key when the data is transferred (Col. 5, lines 25-48).

Hamilton et al further fails to explicitly disclose that the first and second keys are received from the copyright management center. Hamilton et al does disclose, however, that the decrypting and re-encrypting device is given appropriate re-encryption parameters by a cable access control computer which may be located in various locations (Col. 7, lines 57-65). Examiner submits that this cable access

Art Unit: 3621

control computer may be considered to be the copyright management center since the cable access control computer is providing the decrypting and encrypting keys that prevent copyright misuse or general pirating of the content. Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the first and second keys by a copyright management system as suggested by Hamilton et al in order to prevent copyright misuse or general pirating of the content.

5. Claims 110 and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choudhury et al, U.S. Patent No. 5,509,074 in view of Hamilton et al, U.S. Patent No. 5,504,816.

As per **Claims 110 and 116**, Choudhury et al disclose a data copyright management system for managing the copyright of data which is supplied as encrypted data from a database to a user, said data copyright management system comprising:

- a database (Figures 1-3); ; and
- a copyright management center (Figures 1-3),
- wherein the database includes:
- means for receiving a request of use presenting a primary user information from the primary user terminal (Col. 4, lines 13-21);
- means for transferring the first secret-key for encrypting the requested data by the first secret-key and decrypting the encrypted data and a copyright management program, to the primary user terminal via the communication network (Figures 1-3; Col. 3, lines 39-45; Col. 4, lines 13-31); and
- means for transferring the primary user information to the copyright management center (Col. 4, lines 13-21).

Choudhury et al, however, fails to disclose transferring a second key for re-encrypting the decrypted data. Hamilton et al disclose a method for controlling access to digital signals and teaches a method whereby the system decrypts digital signals using one key and then re-encrypting the digital signal using a different second key (Col. 5, lines 25-48) and wherein an access control computer supplies the re-encrypting key (Col. 7, lines 56-65). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Choudhury et al and provide a second key for re-



Art Unit: 3621

encrypting the data as taught by Hamilton et al to ensure that the data cannot be accessed by leaving it in an unencrypted state.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 88-96, 98 and 106-107, 110, 116-121 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,646,999 in view of Choudhury et al, U.S. Patent No. 5,509,074. Although the conflicting claims are not identical, they are not patentably distinct.

Claim 1 of U.S. Patent No. 5,646,999 recites all the limitations of claims 88-96, 98 and 106-107, 110 and 116, however, fails to recite requesting use of the data by presenting primary user information of the terminal device. Choudhury et al disclose a method of protecting electronically published materials using cryptographic protocols and further teach requesting use of the data by presenting primary user information of the terminal device (Col. 4, lines 13-21). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify claim 1 of U.S. Patent No 5,646,999 and include the step of requesting use of the data by presenting primary user information of the terminal device as taught by Choudhury et al. Choudhury et al provides motivation by indicating that this would enable the copyright management system to ensure that the user requesting the data is authorized.

Claim 1 of U.S. Patent No. 5,646,999 differs since it further recites additional claim limitations related to secondary user requests and providing the secondary user with the second secret key. However, it would have been obvious to a person of ordinary skill in the art to modify claim 1 of U.S. Patent No. 5,646,999 by removing the limitations directed these steps resulting generally in the claims of

Art Unit: 3621

the present application since the claims of the present application and the claim recited in U.S. Patent No. 5,646,999 actually perform a similar function. It is well settled that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA 1963). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd. App. 1969). Omission of a reference element whose function is not needed would be obvious to one of ordinary skill in the art.

8. Claims 88-96, 98 and 106-107, 110 and 116-121 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,097,818 in view of Choudhury et al, U.S. Patent No. 5,509,074. Although the conflicting claims are not identical, they are not patentably distinct.

Claim 1 of U.S. Patent No. 6,097,818 recites all the limitations of claims 88-96, 98 and 106-107, 110 and 116, however, fails to recite requesting use of the data by presenting primary user information of the terminal device. Choudhury et al disclose a method of protecting electronically published materials using cryptographic protocols and further teach requesting use of the data by presenting primary user information of the terminal device (Col. 4, lines 13-21). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify claim 1 of U.S. Patent No 6,097,818 and include the step of requesting use of the data by presenting primary user information of the terminal device as taught by Choudhury et al. Choudhury et al provides motivation by indicating that this would enable the copyright management system to ensure that the user requesting the data is authorized.

Claim 1 of U.S. Patent No. 6,097,818 differs since it further recites additional claim limitations related to secondary user requests and providing the secondary user with the second secret key. However, it would have been obvious to a person of ordinary skill in the art to modify claim 1 of U.S. Patent No. 6,097,818 by removing the limitations directed these steps resulting generally in the claims of the present application since the claims of the present application and the claim recited in U.S. Patent No. 6,097,818 actually perform a similar function. It is well settled that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA 1963). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd. App. 1969).

Art Unit: 3621

Omission of a reference element whose function is not needed would be obvious to one of ordinary skill in the art.

***Allowable Subject Matter***

9. Claims 99-100 and 111-113 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 92-96 are allowable over the prior art of record, however, a terminal disclaimer is required based upon the double patenting rejections outlined above.

11. Claims 108-109 and 114-115 are allowable over the prior art of record.

Art Unit: 3621

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hayes whose telephone number is (703)306-5447. The examiner can normally be reached Monday through Friday from 5:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **(703) 305-3900**. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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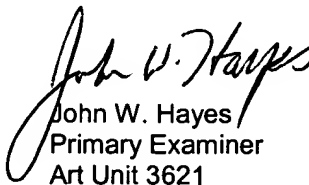
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Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington,  
VA, 7<sup>th</sup> floor receptionist.

  
John W. Hayes  
Primary Examiner  
Art Unit 3621

December 29, 2004